

*The Keitloa* (*Rhinaster keitloa*). By Dr. J. E. GRAY.

The Keitloa, which was first described by Camper from a head received from the Cape of Good Hope, was regarded by Cuvier as the adult of the common Bovili (*R. bicornis*); but he had only seen the figure of the skull which he copies as that of an adult Cape-Rhinoceros in his work on fossil bones. Dr. Andrew Smith described it from living specimens, and showed, by the development of its horns, the general form of its body, and habit, that it was a distinct species, recognized by the natives; but cabinet zoologists who have even visited Africa, and must have seen the animal alive, persisted in regarding it as the same as the Bovili or *R. bicornis*.

The British Museum has lately purchased a complete skeleton of an adult female which Mr. Jesse obtained in Abyssinia; and the comparison of the skull with that of the Bovili (*R. bicornis*) in the British Museum, which was obtained from Mr. Petherick, proves that they are most distinct species, and that Camper's figure is a correct representation of the skull of the Keitloa. The skull of the Keitloa is much more solid and heavy than that of the Bovili, though this is partly dependent on the age of the animal; but still I am inclined to regard it as characteristic. The face, forehead, and crown are much wider than in the skull of the Bovili, the sides of the face being convex, and not flat as in that species; and the forehead under the hinder horn is convex and shelving on the sides, and this part is flat in the skull of the Bovili. In fact the Keitloa is evidently a most distinct and well-marked species, the skull having a very different appearance, especially when looked at on the crown.

Though the natives give the two Rhinoceroses each a distinct name, the generality of African travellers confound the two browsing species together under the name of the Black Rhinoceros of the forest and bush, as distinct from the Mahoochoo or White Rhinoceros of the grassy plains.

*Organogenic investigation of Eupomatia*. By H. BAILLON.

The *Eupomatia*, the exceptional organization and multiple affinities of which have occupied so much of the attention of botanists since the time of Robert Brown, may be studied from an organogenic point of view now that one species of the genus is cultivated in our hot-houses. This investigation reveals some unexpected facts, which, indeed, could only be made known by it.

It shows, among other things, that the flowers of these plants lodge in their concave receptacle a truly *polycarpic* gynæcium; that what has been described as a single areolated stigma merely represents a portion of the dorsal wall of the ovaries; that the stigmata are independent of each other and equal in number to the carpels; and, what would be most inadmissible *à priori*, that these flowers are destitute of a true perianth, a single modified leaf acting the part of the protective agent of the sexual organs. As the consequence of these observations we obtain this fact, that the *Eupomatia*, an abnormal genus among the Annonaceæ, both in the form of their floral receptacle and in the mode of insertion of their stamina, serve as a

transition between this group and that of the Monimicæ, to which they likewise approximate the Calycanthæ through *Chionanthus*, and indirectly the Magnoliacæ through the Trochodendracæ. A branch of *Eupomatia* which is about to flower swells at its apex into a little club, which becomes concave above and gradually undergoes all the changes of form which are observed in the receptacle of a fig. From the aperture at the bottom of this receptacular sac, the pieces of the andrœcium and gynœcium appear successively in a spiral order.

Hitherto that conical hood which detaches itself circularly at the moment of anthesis has been regarded as a perianth, produced by the fusion of the sepals and petals. The study of its development proves that this sac is produced as a single leaf in the form of a crescent, and that it remains long open on one side. It is a sort of amplexicaul bract, following, in the spiral order, the much narrower bracts which are inserted upon the peduncular portion of the branch. This is a demonstration of the axial nature of the portion of the flower of *Eupomatia* which remains basilar. The last of the modified leaves of this dilated branch (that which is inserted at the level of the margin of the receptacle) becomes inordinately developed, in order to fulfil the function of the perianth, which is wanting; and, like many other cauline leaves of plants allied to this, it finally becomes detached, in the direction of the base of the axis upon which it was borne.—*Comptes Rendus*, July 27, 1868, p. 250.

#### Note on *Rhizocrinus lofotensis*.

Prof. Louis Agassiz, in a note to Count Pourtales's paper entitled "Contributions to the Fauna of the Gulf-Stream at Great Depths," observes that the Crinoid that Count Pourtales had called *Bourguetocrinus Hotessieri*, from great depths in the Gulf of Mexico, is evidently the same as Prof. Sars's *Rhizocrinus lofotensis* from the coast of Norway. He further observes that it is highly probable that *Lophohelia affinis* of Count Pourtales, from Florida, is identical with *L. prolifera* from the northernmost coast of Europe, to which it has very likely been transported by the Gulf-stream.

#### Quoy and Gaimard's Species of Corals.

A considerable number of species of *Aleyonia* are figured and shortly described by MM. Quoy and Gaimard, in the 'Voyage of the Astrolabe.' From the official report on the collection made at the time, and from the Expedition having been a Government Expedition, I had believed that the specimens on which these species are founded would be in the collection of the Jardin des Plantes. Though MM. Milne-Edwards and Haime mention the species in their work on the Corals, the account of them is copied from Quoy and Gaimard's work, and no reference is made showing that the specimens have been seen or examined. It is to be hoped that they have not been lost to science, more especially as Quoy and Gaimard's descriptions are short and sometimes do not contain particulars of the species (as spicules &c.) that are represented on the plates.—J. E. GRAY.